Accident / Incident Report Closed

Unit/Department	Process Area	Site	Report Number
South Operation-Elyria		**ELYRIA**	**0084-SOPS-15-0014**
Report Date	Incident Date	Incident Time	Copied From
02/03/2015	**02/03/2015**	**12:40 AM**	
Incident Location		Team Leader / Supervisor	Reported By
Building 9		**Terrence M Vanderbosch**	**Alexander Donald**
Title of Event (Limit to 90 characters)		Category	Division / Bus. Group / Subgroup Code
PK blender lid pressurized and came off.		☐ Safety & Health ☐ Environmental	**CC / G-CCP**

Incident Classification

☒ Near Miss	☐ Property Loss	☐ Contractor
☐ Process Safety	☐ Citation / NOV	☐ Contractor Injury / Illness
☐ Injury / Illness	☐ Health Exposure	☐ Contract Injury / Illness
☒ Spill / Release	☐ Inspection	☐ PSM
☐ Permit / Regulatory Deviation	☐ Major Incident	☐ Plant Upset
☐ Fire	☐ Non-Occupational	☐ EHS Management System Failure
☐ Odor Complaint	☐ RMP	☐ Other

Describe Event / What Happened

An operator finished making a batch of Selexsorb on the PK blender. When the operator opened the valve to discharge the product into the bag nothing came out. The operator opened and closed the valve a few times and still no powder came out. The operator then went up to the top lid of the PK blender and began to slowly loosen it. After the second turn of the screw assembly the lid came off of the blender in the direction of the operator, hitting the support bar and also striking the operator's hard hat, covering him with material. The operator did not sustain any injuries.

Immediate Corrective Action or Response

Supervisor sent the operator to take a shower and get cleaned up. Had two other operators clean the area after allowing the dust to settle in the room.

Immediate Cause

Pressure build up in blender from making a batch.

Spill Release Type(s)	**Non RQ Spill / Release**						
Chemical(s) Involved	CAS #	Phy. State	Air	Land	Water	Contmt	Units
Selectsorb	N/A	Dust	0	0	0	30	lbs

Disposition of Material	**Materials cleaned up and disposed of**			
Weather Conditions	Skies:	Temperature:	Wind Direction:	Wind Speed:

Cause Narrative

Pressure build up inside of blender due to discharge valve not opening while attempting to unload batch.

Contributing Causes	Root/Primary Causes		
Control panel readout did not match valve position	138 - Human Factors Engineering	140 - Workplace Layout	143 - Control/Display Integration/Arrangement LTA
System cannot detect pressure is present	138 - Human Factors Engineering	160 - Intolerant System	161 - Errors Not Detectable
Working batch sheet does not have all of the precautions that the manufacturing document has	111 - Procedures	117 - Misleading/Confusing	118 - Format Confusing or LTA
current tab allows lid to slide off	15 - Design Input/Output	16 - Design Input LTA	16 - Design Input LTA

Explanation of Root Causes
143 - there is an air line to the valve that was not opened. The panel indicator noted that the valve was in the open position, however, with the air off the valve did not open. The controls are not interlocked
161 - currently cannot detect that pressure is in vessel. There is no indication of pressure. The operator loosen the lid in a normal fashion and pressure did not vent before the lid came off.
111 - The Batch sheet does not have all of the warnings that are specified in the Manufacturing document regarding possible pressure buildup
16 - The current lid design does not allow the to be easily retained to the vessel

Any known or potential off-site impacts?	**No**	PSM Incident?	**No**	Estimated Cost:	**2,000.00 USD**
Investigation Team	**John R Crawford; Leon Zavodnik; Alexander Donald; Seth Diewald; John Bodmann; Brian Beller; Terrence M Vanderbosch; Noemi Trent; Sean M Holly**				

Item	Corrective Action(s) to prevent recurrence	Responsible Person	Target Date	Final Closed Date	VC Req	VE Req
1	Allocate resources to redesign current valve to allow for feedback on valve position with appropriate interlocks to ensure valve is open	Raymond Hazlerig/NA/BASF	08/05/2015	08/03/2015	N	N
2	Investigate if pressure monitoring can be installed on blender so operator knows that pressure has built up	Raymond Hazlerig/NA/BASF	10/05/2015	09/29/2015	N	N
3	Modify batch sheets for appropriate warnings and actions to take during batch processing to ensure blender does not pressurize	John Bodmann/BASF-CATALYSTS/BASF	02/19/2015	02/16/2015	N	N
4	Redesign lid and tabs to prevent lid from popping off if pressure builds up. See if lid can be attached to lip of blender	Brian Beller/NA/BASF	03/27/2015	02/12/2015	N	N
5	Review and Modify PK operating procedures to account for the possibility of pressure in the vessel	John Bodmann/BASF-CATALYSTS/BASF	06/05/2015	06/04/2015	N	N
6	Modify all batch sheets for PK products that describe that venting through top port should occur (Cr-0218P, etc). Change sheets to stop this practice	John Bodmann/BASF-CATALYSTS/BASF	06/25/2015	06/24/2015	N	N
7	Modify all batch sheets for PK products that describe that venting through top port should occur if applicable (Pill mix). Change sheets to stop this practice	Justin Quach/NA/BASF	06/25/2015	03/16/2015	N	N

Approved By:	
Manager / Dept. Head	**Leon Zavodnik 02/19/2015 10:55 AM**
EHS Unit Coordinator	**Dean R Gadoury 02/19/2015 10:59 AM**
	Confidential